

小笠原義秀 教授 略歴・業績

略 歴

- 1949年 神奈川県横浜市生まれ
- 1974年 早稲田大学教育学部理学科地学専修卒業
- 1976年 早稲田大学大学院理工学研究科修士課程修了
- 1982年 早稲田大学大学院理工学研究科博士課程修了 工学博士（早稲田大学）
- 1982年 早稲田大学理工学研究所嘱託
- 1983年 早稲田大学教育学部専任講師
- 1990年 早稲田大学教育学部助教授
- 1993-1994年 米国スタンフォード大学地球科学部訪問研究員
- 1996年 早稲田大学教育学部教授（2004年9月改組により教育・総合科学学術院教授）
- 2004年 早稲田大学教員組合執行委員長
- 2010-2014年 早稲田大学評議員
- 2017-2020年 早稲田大学評議員

専門分野

地球物質科学, 変成岩岩石学

所属学会

米国地球物理学連合学会（AGU）、米国地質学会（GSA）、米国鉱物学会（MSA）、日本地質学会

主要業績

<著書>

- （分担執筆）地球・環境・資源—地球と人類の共生をめざして 第2版. 共立出版, 206頁（2018）
- （単）超高压变成作用起源のダイヤモンド, 早稲田大学出版部, 109頁（2009）
- （共）企業年金が危ない. 講談社+α新書, 221頁（2009）

<論文>

- （共）Maruyamaite, $K(MgAl_2)(Al_5Mg)Si_6O_{18}(BO_3)_3(OH)_3O$, a potassium-dominant tourmaline from the ultrahigh-pressure Kokchetav massif, northern Kazakhstan: Description and crystal structure. *American Mineralogist*, 101, 355-361 (2016)

- (共) Hydrous Na-garnet from Garnet Ridge; products of mantle metasomatism underneath the Colorado Plateau. *Progress in Earth and Planetary Science*, 3–20 (2016)
- (共) Radiation damage of Kokchetav UHPM diamonds in zircon: Variations in Raman, photoluminescence, and cathodoluminescence spectra. *Lithos*, 206–207, 201–213 (2014)
- (単) Titanite stability in UHP metacarbonate rocks from the Kokchetav Massif, northern Kazakhstan. 学研究 – 自然科学編, 早稲田大学教育学部, No. 62, 11–31 (2014)
- (共) Hydroxyl in clinopyroxene and titanite in a UHP diamond-free garnet-clinopyroxene rock from the Kokchetav Massif, northern Kazakhstan. *International Geology Review*, 56, 133–149 (2014)
- (共) Diversity of potassium-bearing tourmalines in diamondiferous Kokchetav UHP metamorphic rocks: A geochemical recorder from peak to retrograde metamorphic stages. *Journal of Asian Earth Sciences*, 63, 39–55 (2013)
- (共) Carbon isotope heterogeneity in metamorphic diamond from the Kokchetav UHP dolomite marble, northern Kazakhstan. *International Geology Review*, 55, 453–467 (2013)
- (共) Tale of the Kulet eclogite from the Kokchetav Massive, Kazakhstan: Initial tectonic setting and transition from amphibolite to eclogite. *Journal of Metamorphic Geology*, 30, 537–559 (2012)
- (共) The role of fluid for diamond-free UHP dolomitic marble from the Kokchetav Massif. GSA International Book Series Vol. 9 *Phase Relations, High-Pressure Terranes, P-T-Ometry, and Plate Pushing - A tribute to W.G. Ernst*, 120–133 (2006)
- (共) Cathodoluminescence of microdiamond in dolomite marble from the Kokchetav Massif – Additional evidence for two-stage growth of diamond. GSA International Book Series Vol. 9 *Phase Relations, High-Pressure Terranes, P-T-Ometry, and Plate Pushing - A tribute to W.G. Ernst*, 95–107 (2006)
- (共) Hydroxyl in diopside of diamond-free UHP dolomitic marble from the Kokchetav Massif, Kazakhstan in “*Ultrahigh-pressure metamorphism: Deep Continental Subduction*”. *Geological Society of America Special Paper*, 403, 139–145 (2006)
- (共) The role of fluid for diamond-free UHP dolomitic marble from the Kokchetav Massif. *International Geology Review*, 47, 1178–1193 (2005)
- (共) Cathodoluminescence of microdiamond in dolomite marble from the Kokchetav Massif - Another evidence for two-stage growth of diamond. *International Geology Review*, 47, 703–715 (2005)
- (単) Microdiamonds in Ultrahigh-Pressure Metamorphic Rocks. *Elements*, 1, 91–96 (2005)
- (共) Clinopyroxene phenocrysts (with green salite cores) in trachybasalts: implications for two magma chambers under the Kokchetav UHP Massif, Northern Kazakhstan. *Journal of Asian Earth Sciences*, 22, 517–527 (2004)

- (共) Discovery of coesite from Indus Suture Zone (ISZ), Ladakh, India: Evidence for deep subduction. *European Journal of Mineralogy*, 16, 235–240 (2004)
- (共) Carbonate-bearing UHPM rocks from the Tso-Morari region, Ladakh, India: petrochemical implications. *International Geology Review*, 45, 49–69 (2003)
- (共) Oxygen, carbon, and strontium isotope geochemistry of diamond-bearing carbonate rocks from Kumdy-kol, Kokchetav Massif, Kazakhstan. *Lithos*, 70, 77–90 (2003)
- (共) Two stage growth of microdiamonds in UHP dolomite marble from Kokchetav Massif, Kazakhstan, *Journal of Metamorphic Geology*, 21, 515–522 (2003)
- (共) Mineral inclusions in zircon from diamond-bearing marble in the Kokchetav massif, northern Kazakhstan. *European Journal of Mineralogy*, 14, 1103–1108 (2002)
- (共) Carbon recycled into deep Earth: Evidence from dolomite dissociation in subduction-zone rocks. *Geology*, 30, 947–950 (2002)
- (共) Phlogopite and coesite exsolution from super-silicic clinopyroxene. *International Geology Review*, 44, 831–836 (2002)
- (共) Petrogenesis of Ti-clinohumite-bearing garnetiferous ultramafic rocks from Kumdy-kol. In “*The Diamond-Bearing Kokchetav Massif, Kazakhstan*”. Universal Academic Press, 343–359 (2002)
- (共) Morphology and distribution of microdiamonds in Dolomite marble from Kumdy-kol. In “*The Diamond-Bearing Kokchetav Massif, Kazakhstan*”. Universal Academic Press, 93–102 (2002)
- (共) Coesite exsolution from supersilicic titanite in UHP marble from the Kokchetav Massif, northern Kazakhstan. *American Mineralogist*, 87, 454–461 (2002)
- (共) The mineralogy of the Kokchetav ‘lamproite’: implications for the magma evolution. *Journal of Volcanology and Geothermal Research*, 116, 35–61 (2002)
- (共) Coesite inclusions and prograde compositional zonation of garnet in eclogite from Zekou in the Su-Lu Ultrahigh-pressure terrane, eastern China. *Journal of Mineralogical and Petrological Sciences*, 96, 100–108 (2001)
- (共) Petrology of the diamond-grade eclogite in the Kokchetav Massif, northern Kazakhstan, *The Island Arc*, 9, 379–399 (2000)
- (共) Diamond-bearing and diamond-free metacarbonate rocks from Kumdy-kol in the Kokchetav Massif, northern Kazakhstan. *The Island Arc*, 9, 400–416 (2000)
- (共) Geology, petrology and tectonics of the HP-UHPM Kokchetav Massif, Kazakhstan: Results of the TITech-Waseda Kokchetav Research Program. *Field Guide Book of 4th International Eclogite Field Symposium*, 4th International Eclogite Field Symposium Committee, 89–134 (1999)
- (共) 飛驒變成帶東漆山に産出する変複合貫入岩体. 地質学雑誌, 104, 655–671 (1998)
- (共) Petrogenesis of dolomitic marbles from Rongcheng in the Sulu UHP metamorphic terrane,

eastern China. *The Island Arc*, 7, 82–97 (1998)

- (共) Petrogenesis of impure dolomitic marble from Dabie Mountains, central China. *The Island Arc*, 7, 98–114 (1998)
- (共) 3D visualization of rock textures. *Proceedings of 30th International Geological Congress*, 25, 133–144. (1998)
- (共) Thermochemical calculation of $\log f_{O_2}$ -T-P stability relations of diamond-bearing assemblages in the model system CaO - MgO - SiO_2 - C - O_2 - H_2O . *Russian Geology and Geophysics*, 38, 587–598 (1997)
- (共) 地球科学教育に利用できるインターネット WWW サイト. 地学教育, 50, 29–41 (1997)
- (共) AVS による岩石組織の 3 次元観察の試み—マグマ混合した岩石の実例—. 早稲田大学情報科学研究教育センター紀要, 20, 12–23 (1996)
- (共) Petrogenetic grid for ultrahigh-pressure metamorphism in the model system CaO - MgO - SiO_2 - CO_2 - H_2O . *The Island Arc*, 4, 240–253 (1995)
- (共) Impure marbles from the Xinyan area, Dabie mountains, central China. *Chinese Science Bulletin*, 40 (supplement), 98–101 (1995)

<新鉱物発見>

- (国際鉱物学連合承認報告, 共) Maruyamaite (丸山電気石) : Maruyamaite, IMA 2013–123. CNMNC Newsletter No. 20, *Mineralogical Magazine*, 78, 550–551 (2014)

<海外学術雑誌特集号編集委員>

- 2013年 “HP-UHP Metamorphic Belts in Asia”, *Journal of Asian Earth Sciences*, Vol. 63
- 2003年 “Petrochemical and Tectonic Processes of UHP/HP Terranes II”, *Journal of Metamorphic Geology*, Vol. 21, No. 6
- 2002年 “Petrochemical and Tectonic Processes of UHP/HP Terranes I”, *International Geology Review*, Vol. 44, No. 9

<主催国際ワークショップ>

- 2001年 8 月 “Fluid / Slab / Mantle Interactions and Ultrahigh-P Minerals”, Waseda University – International Lithosphere Program Task Group
- 1997年 9 月 “Tokyo Workshop on Kokchetav Deep Drilling Project”, Waseda University

<受賞>

- 2015年 米国地質学会フェロー